

Bridget K. Daugherty

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OBJECTIVE A summer internship to pursue my passion for designing innovative solutions to clinical and global engineering problems in a small team environment.

EDUCATION **Bachelor of Science, Engineering (Biomedical Engineering)** May 2018
Tulane University, New Orleans, LA

Academic Honors: Tulane Honors Program • Tulane Scholars Program • Distinguished Scholar Award (\$25,000/year merit scholarship) • Science and Engineering Honors Society • Biomedical Engineering Society • Women in Science • Georges Lurcy Grant Recipient • Newcomb College Institute Grant Recipient • Study Abroad University College Dublin (Fall 2016 Semester)

Notable Coursework: Biomedical Engineering Product and Experimental Design, Biomedical Electronics, Biomedical Acoustics, Mechanics of Materials, Electric Circuits, Differential Equations, Statics, Materials Science and Engineering, Computational Concepts and Applications, Intro to Cellular and Molecular Biology, Intro to Organic and Biochemistry, Intro to Research Method

RELEVANT EXPERIENCE **Student Intern** June – August 2016
Relay Design Group, Entergy Louisiana, New Orleans, LA

- Worked on a team and individually to solve engineering problems associated with relay protection schemes of power systems in Louisiana.

Undergraduate Researcher November 2015 – Current
Biomedical Acoustics Lab, Tulane University, New Orleans, LA

- Analyzed the effect of ultrasound treatment on the length and density of E18 Rat Cortex neurons using microscopy and mathematical modeling with MATLAB.

BioEngineering Research Intern May – August 2015
Stayton Lab, University of Washington, Seattle, WA

- Evaluated drug release profiles of various polymer-drug conjugates in human serum via analytical HPLC to characterize the development of novel polymeric drug delivery systems.

TECHNICAL SKILLS **Lab:** High Purification Liquid Chromatography • Sample Preparation • Cell Culturing • Microcentrifuge • Micropipette • Light Microscope • Vortex • Gel Electrophoresis • Sonication
Computer: GraphPad Prism • SolidWorks • MultiSim • Adobe Creative Suite • MATLAB • Microsoft Office • AutoCAD

PUBLICATIONS Das D., Srinivasan S., Kelly A.M., Chiu D.Y., Daugherty B.K., Ratner D.M., et al. RAFT polymerization of ciprofloxacin prodrug monomers for the controlled intracellular delivery of antibiotics. *Polym Chem.* 2016; 7:826-37.

Son H. N., Srinivasan S., Yhee J.Y., Das D., Daugherty B.K., Berguig G.Y., Oehle V.G., Kim S.H., K. Kim, Kwon I.C., Stayton P.S., and Convertine A.J. Chemotherapeutic copolymers prepared via the RAFT polymerization of prodrug monomers. *Polym Chem.* 2016; 7:4494-4505.

LEADERSHIP & SERVICE **Outreach Officer and National Member** May 2015 – Current
Society of Women Engineers Club, Tulane University

Volunteer ACT Tutor January – May 2016
New Orleans Charter Science and Mathematics High School

Volunteer Mathematics Tutor January – May 2015
New Orleans Charter Science and Mathematics High School